

Instructions for creating an Alaska Albers Coordinate System Group in Pathfinder Office 2.9

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<http://web/rgr/rgr2.htm> (Alaska NPS Intranet)

<http://165.83.48.21/rgr/rgr2.htm> (NPS-wide Intranet)

Background: Pathfinder Office ver 2.9 now supports the Alaska Albers Coordinate System. In order to ensure Pathfinder Office recognizes this coordinate system, you must first Update Pathfinder Office with all recommended and critical updates, then create a coordinate system in the Coordinate System Manager Utility within Pathfinder Office. Here are the Steps.

Assumptions:

- You have Pathfinder Office 2.9 This will not work on earlier versions.
- You want to be able to view Alaska Albers data in Pathfinder Office View windows and export to Alaska Albers for GIS.

NOTE: Every time you re-install Pathfinder Office from a CD or receive a new version, you will be asked to overwrite previous installation parameters. It is always a good idea to answer Yes to complete a fresh install. When this is done, you will need to repeat these installation steps to ensure you have the Alaska Albers coordinate system available.

Update Pathfinder Office 2.9 with latest Updates

Update Pathfinder Office 2.9 with all Web updates.

- 1). Open Pathfinder Office. Click on Help and select "Check for new GPS Pathfinder Office updates Now".
- 2). Follow wizard to download the latest from the Web. Be sure all recommended and critical updates are loaded and installed.
- 3). Reboot PC.

Backup current.csd file before Proceeding Further

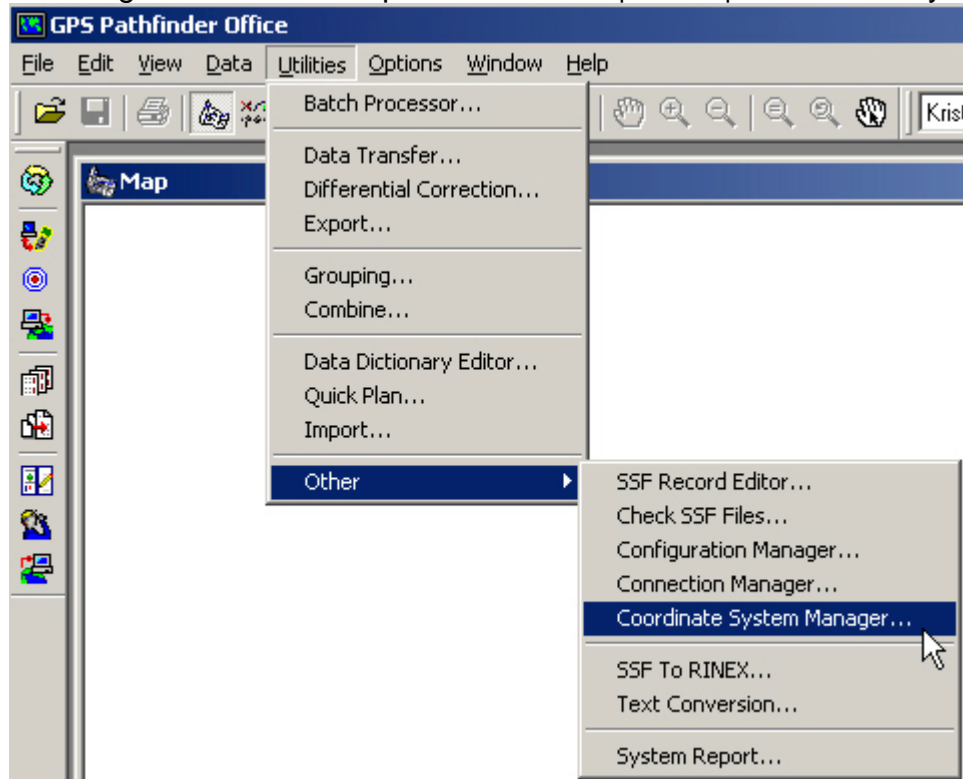
Making a mistake at this point can produce havoc with your system. Please follow these steps closely.

- 1). Navigate to C:\Program Files\Common Files\Trimble\GeoData in Windows Explorer.
- 2). Create a backup of current.csd file.
 - a. Copy current.csd by highlighting the file, Select Edit | Copy
 - b. Select Edit | Paste.
 - c. You should now have a current.csd and a copy of that file called "copy of current.csd" in the same directory.
- 3). Now you can alter the current.csd file and still recover if a mistake is made.

HINT: If trouble arises later in document and your are notified that Coordinate system cannot open, then return to C:\Program Files\Common Files\Trimble\GeoData, delete the current.csd and rename "copy of current.csd" back to current.csd. Start over.

Create a Coordinate System group in the Coordinate System Manager Utility.

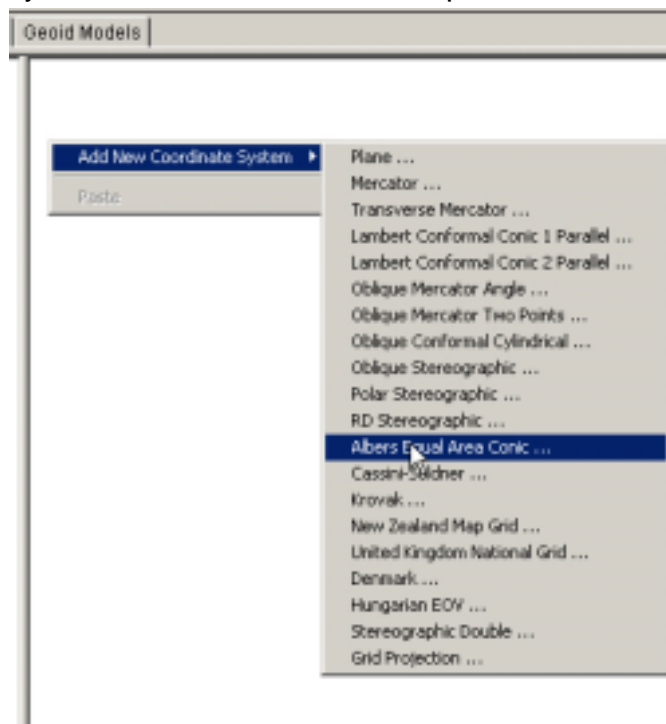
1). Open Pathfinder Office and open the Coordinate System Manager utility by selecting Utilities from the pull-down menu | Other | Coordinate System Manager...



2). Select Edit | “Add Coordinate System Group”. In the Coordinate System Group Parameter Dialog box, enter this Text. Press OK



3). You should now see a blue folder on the left side of the Coordinate System Manager indicating a newly created Group. Click once on the blue “US Continental” folder , then right-mouse click somewhere in the right side panel. Select “Add Coordinate System” and choose “Albers Equal Area Conic...” from the list.

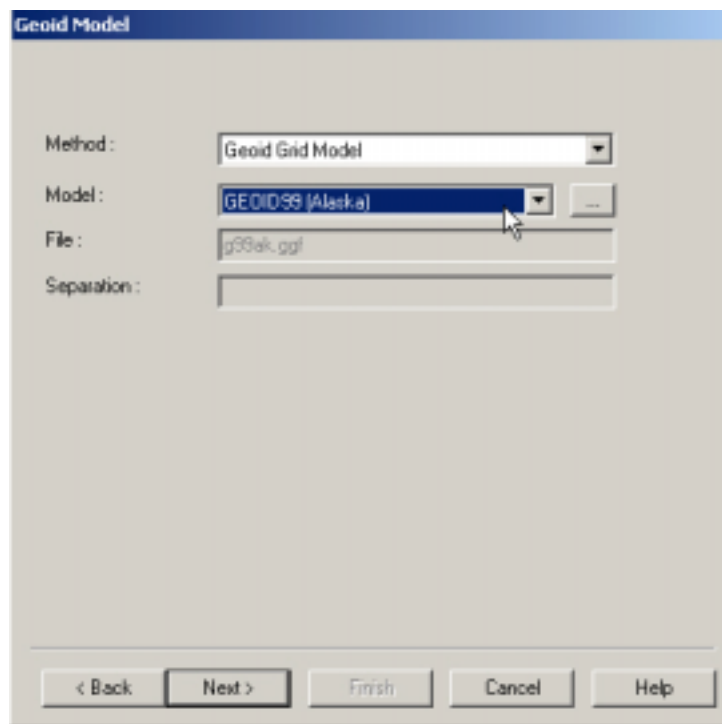


4). Enter in the following parameters for each tab. Double check!

- a.) Zone Parameters: Name: **Alaska Albers** ;Datum Name: **NADCON (Alaska)**;
Datum Method: **Datum Grid**

A screenshot of the 'Zone Parameters' dialog box. It contains four input fields: 'Name' with the value 'Alaska Albers', 'Export Name' with the value 'Alaska Albers', 'Datum name' with a dropdown menu showing 'NADCON (Alaska)', and 'Datum method' with a dropdown menu showing 'Datum Grid' and a small '...' button to its right. At the bottom of the dialog are five buttons: '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'. A mouse cursor is pointing at the 'Name' field.

b.) Geoid Model: Method: **Geoid Grid Model**; Model: **GEOID 99 (Alaska)**

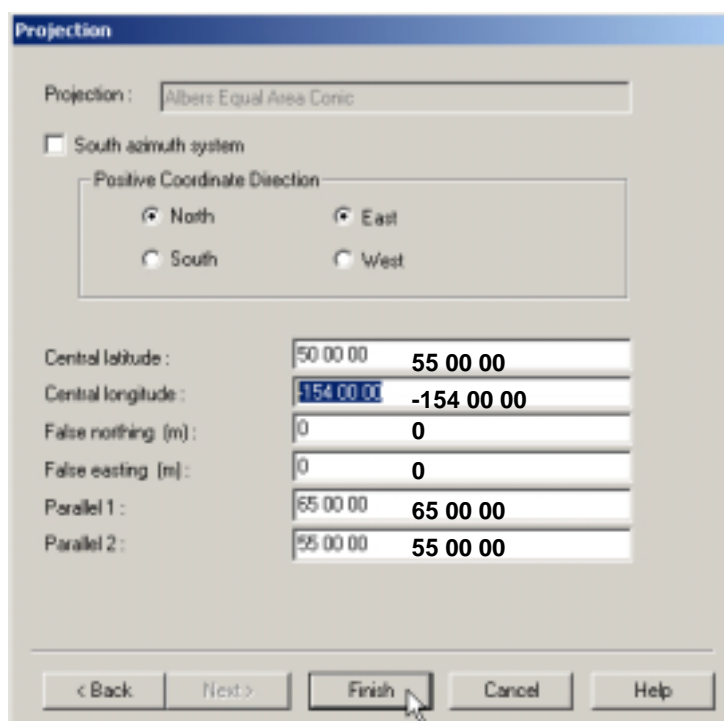


The Geoid Model dialog box is shown with the following settings:

- Method: Geoid Grid Model
- Model: GEOID99 (Alaska)
- File: g99ak.gpf
- Separation: (empty)

Buttons at the bottom: < Back, Next >, Finish, Cancel, Help.

c.) Projection:



The Projection dialog box is shown with the following settings:

- Projection: Albers Equal Area Conic
- ☐ South azimuth system
- Positive Coordinate Direction:
 - ☒ North
 - ☒ East
 - ☐ South
 - ☐ West
- Central latitude: 50 00 00, 55 00 00
- Central longitude: -154 00 00, -154 00 00
- False northing (m): 0, 0
- False easting (m): 0, 0
- Parallel 1: 65 00 00, 65 00 00
- Parallel 2: 55 00 00, 55 00 00

Buttons at the bottom: < Back, Next >, Finish, Cancel, Help.

Press Finish and you should see a completed Alaska Albers Coordinate System.

- 5.) Once you are sure the Parameters for Alaska Albers are exactly specified as above, save the settings in the current.csd file by selecting File | Save. Close the Coordinate System Manager and proceed to testing the result.

Testing Results.

You are now able to view Alaska Albers projected Raster data such as DRG's, and other data in Pathfinder Office View window. In addition, you may also directly export Alaska Albers shapefiles or coverages directly from Pathfinder office – both processes rely on the settings you specified in the previous steps, so it is a good thing to test your results. We will do this by bringing into the Pathfinder View window a projected DRG as a background file. This steps assumes you have access to data on the X:drive or some network where DRG's reside.

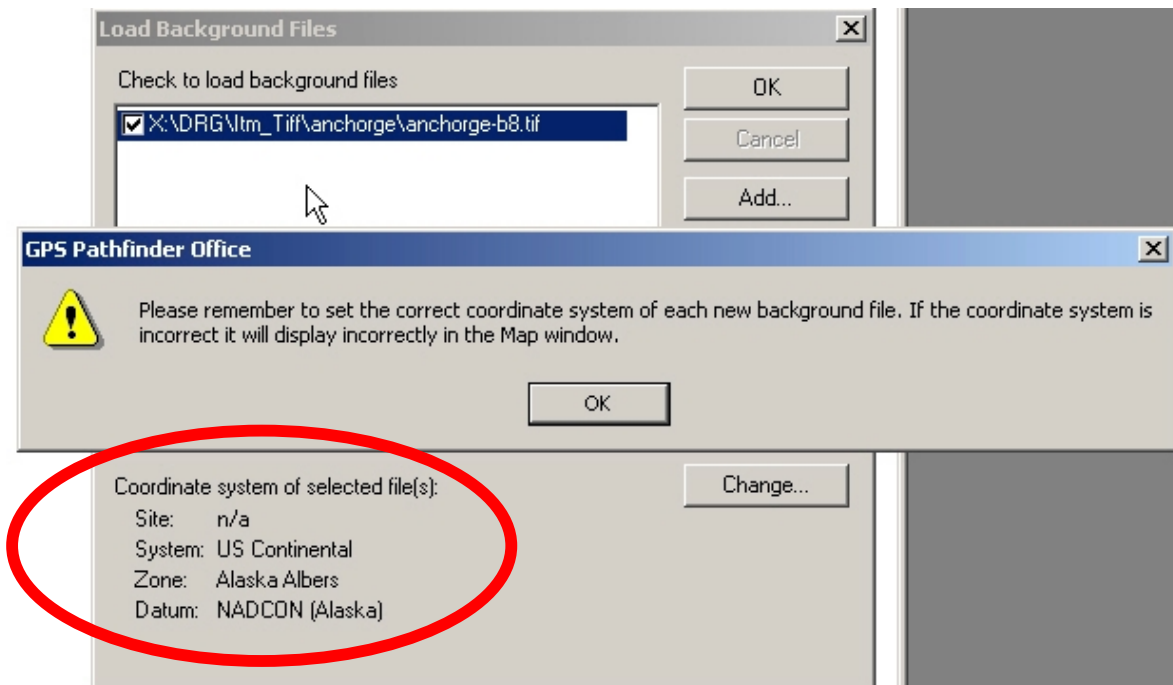
- 1) Open Pathfinder Office and select a Project. Make sure your Map View is open by selecting View | Map
- 2) Lets set the Coordinate system for the View to Alaska Albers using the new coordinate system. Select Options | Coordinate System... and enter these properties. Once the US Continental Group is selected under System other information is automatically filled in. You must ensure Coordinate Units are set to **Meters!**

The screenshot shows the 'Coordinate System' dialog box with the following settings:

- Select By:** ☒ Coordinate System and Zone, ☐ Site
- System:** US Continental
- Zone:** Alaska Albers
- Datum:** NADCON (Alaska)
- Altitude Measured From:** ☐ Height Above Ellipsoid (HAE), ☒ Mean Sea Level (MSL)
- Geoid Model:** ☒ Defined Geoid (GEOD99 (Alaska)), ☐ Other
- Geoid:** GEOD99 (Alaska)
- Coordinate Units:** Meters (circled in red)
- Altitude Units:** Meters

Buttons: OK, Cancel, Help

3). Press OK and lets bring in a DRG from the network. From the File | Background navigate to X:/DRG/ltn_tiff and select a quad folder from your area. For Anchorage I will select the Anchorage A8 tiff. You will get a warning from Pathfinder Office to be sure to load the correct coordinate system. If the coordinate system is not set to US Continental, then Press the Change... button and select the options as in the previous step. Press OK.



4). Congratulations. You can now view your pathfinder office data without GIS to ensure data is correct. You may also select Alaska Albers during exports for your GIS.

